AMENDMENTS TO THE CLAIMS

1. (currently amended) A ~~compound~~ composition comprising:

a porphyrin, and

a chemotherapeutic agent,

wherein said chemotherapeutic agent is not a polyamine, polyamine analog, cyclic polyamine, cyclic polyamine analog, dioxonaphthoquinone, or dioxonaphthoquinone derivative;

and wherein the chemotherapeutic agent is selected from the group consisting of antitumor antibiotics, doxorubicin, bleomycin, dactinomycin, daunorubicin, epirubicin, idarubicin, mitoxantrone, mitomycin, epipodophyllotoxins, etoposide, teniposide, antimicrotubule agents, vinblastine, vincristine, vindesine, vinorelbine, other vinca alkaloids, taxanes, paclitaxel (taxol), docetaxel (taxotere), nitrogen mustards, chlorambucil, cyclophosphamide, estramustine, ifosfamide, mechlorethamine, melphalan, aziridines, thiotepa, alkyl sulfonates, busulfan, nitrosoureas, carmustine, lomustine, and streptozocin, alkylators, altretamine, dacarbazine, procarbazine, temozolamide, folate analogs, methotrexate, purine analogs, fludarabine, mercaptopurine, thioguanine, adenosine analogs, cladribine, pentostatin, pyrimidine analogs, capecitabine, cytarabine, floxuridine, fluorouracil, gemcitabine, substituted ureas, hydroxyurea, camptothecin analogs, irinotecan and topotecan, topoisomerase I inhibitors, topoisomerase II inhibitors, and anthracycline antibiotics; wherein the porphyrin is covalently linked to the chemotherapeutic agent;

and all salts, hydrates, ~~crystalline forms,~~ and stereoisomers thereof.

2. (canceled)

3. (currently amended) The ~~compound~~ composition of claim ~~2~~ 1, wherein the porphyrin is covalently linked to the chemotherapeutic agent via a linking group.

4. (currently amended) The ~~compound~~ composition of claim ~~2~~ 1, wherein the porphyrin is selected from the group consisting of mesoporphyrins, deuteroporphyrins, hematoporphyrins, protoporhyrins, uroporphyrins, coproporphyrins, cytoporphyrins, rhodoporphyrin, pyrroporphyrin, etioporphyrins, phylloporphyrins, heptacarboxyporphyrins, hexacarboxyporphyrins, pentacarboxyporphyrins, and other alkylcarboxyporphyrins; and derivatives thereof.

5. (currently amended) The ~~compound~~ composition of claim 4, wherein the porphyrin is selected from the group consisting of derivatives of deuteroporphyrins.

6. (currently amended) The ~~compound~~ composition of claim 5, wherein the porphyrin is selected from the group consisting of sulfonic acid derivatives of deuteroporphyrins.

7. (currently amended) The ~~compound~~ composition of claim 4, wherein the porphyrin is a mesoporphyrin.

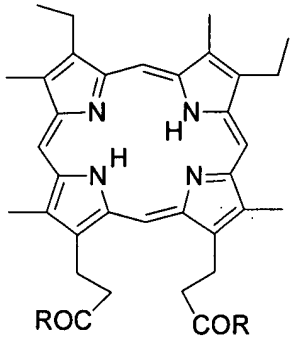
8. (currently amended) The ~~compound~~ composition of claim 7, wherein the porphyrin is mesoporphyrin IX.

9. (canceled)

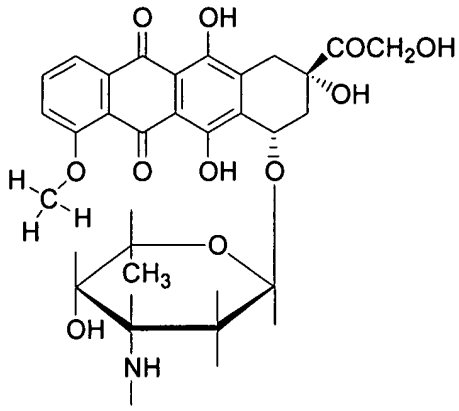
10. (currently amended) The ~~compound~~ composition of claim ~~2~~ 1, wherein the chemotherapeutic agent is doxorubicin.

11. (currently amended) The ~~compound~~ composition of claim ~~2~~ 1, wherein the chemotherapeutic agent is doxorubicin and the porphyrin is mesoporphyrin IX.

12. (currently amended) The ~~compound~~ composition of claim 11 of the structure:



wherein R is



13. (currently amended) A method of treating a disease characterized by uncontrolled cell proliferation, wherein the method comprises administering a therapeutically effective amount of a ~~compound~~ composition of claim ~~2~~ 1.

14. (Original) The method of claim 13, wherein the disease is cancer.

15. (currently amended) A method of treating a disease characterized by uncontrolled cell proliferation, wherein the method comprises administering a therapeutically effective amount of the ~~compound~~ composition of claim 10.

16. (currently amended) A method of making a ~~compound~~ composition of claim ~~2~~ 1, comprising forming a covalent bond between a porphyrin and a chemotherapeutic agent.

17. (currently amended) A method of making the ~~compound~~ composition of claim 12, comprising reacting doxorubicin with mesoporphyrin IX in the presence of a reagent that causes an amide bond to form, said amide bond form by reaction of a mesoporphyrin carboxyl group and a doxorubicin amino group.

18. (currently amended) The method of claim 17, wherein the reagent that causes an amide bond to form is selected from the group consisting of ~~onium~~ uronium and phosphonium reagents and carbodiimides.

19. (new) A method of treating a disease characterized by uncontrolled cell proliferation, wherein the method comprises administering a therapeutically effective amount of a composition of claim 12.

20. (new) The method of claim 19, wherein the disease is cancer.

21. (new) A method of treating cancer, comprising administering a therapeutically effective amount of a composition of claim 1 via oral administration.

22. (new) A method of treating cancer, comprising administering a therapeutically effective amount of a composition of claim 10 via oral administration.

23. (new) A method of treating cancer, comprising administering a therapeutically effective amount of a composition of claim 12 via oral administration.

24. (new) A method of treating cancer, comprising administering a therapeutically effective amount of a composition of claim 1 via subcutaneous administration.

25. (new) A method of treating cancer, comprising administering a therapeutically effective amount of a composition of claim 10 via subcutaneous administration.

26. (new) A method of treating cancer, comprising administering a therapeutically effective amount of a composition of claim 12 via subcutaneous administration.

27. (new) A method of treating cancer, comprising administering a therapeutically effective amount of a composition of claim 1 via intraperitoneal administration.

28. (new) A method of treating cancer, comprising administering a therapeutically effective amount of a composition of claim 10 via intraperitoneal administration.

29. (new) A method of treating cancer, comprising administering a therapeutically effective amount of a composition of claim 12 via intraperitoneal administration.

30. (new) A method of treating cancer, comprising administering a therapeutically effective amount of a composition of claim 1 via intravenous administration.

31. (new) A method of treating cancer, comprising administering a therapeutically effective amount of a composition of claim 10 via intravenous administration.

32. (new) A method of treating cancer, comprising administering a therapeutically effective amount of a composition of claim 12 via intravenous administration.

33. (new) A composition comprising the composition of claim 12, formulated for oral administration.